CS 341: Data Structure and Algorithms   **Due: March 30th, 2010**
Project Proposal

Your final project will consist of:
1. A program which incorporates some of the data structures and algorithms we have learned in this course.
2. Documentation of your project including design and test documents.
3. The presentation of your project in class.

Your project will be graded on the difficulty of the program you select, how well you utilized the concepts from this course, as well as the quality of your code, documentation, and presentation.

For this project, you may work individually or in a group (up to 3 members). If you have a group for the project, you need to only submit one project proposal. Of course, if you elect to work in a group, the size of your project should reflect this choice.

For next week, you should submit a single spaced one to two-page project proposal that gives an overview of your project idea, requirements and goals. If you have your own unique project idea, great! If not, here are some ideas to get you thinking. (You may use or modify any listed here, but still have to write up a proposal with a summary of your project requirements and goals with more detail than is given here.)

1. Write a recursive connect four program. Make it smart enough that a computer player will not just blindly select a location to mark. Allow two computer players, one computer and one human player, or two human players. Add something to make the program more difficult than a typical homework, for example try to use a graphics library to draw the board.

2. Write a round-robin process scheduler using queues. (See an operating systems textbook for more information on process scheduling). Allow the user to input new processes and their required processing time. Display the process that is using the processor at any given time.

3. Produce a visual demo in Java of the sorting algorithms or a set of data structures we have discussed. Include benchmarking analysis in the demo. This could be used as a learning tool for other people learning about these topics.

Proposals may be submitted electronically with the subject line:
        CS341 proposal submission <Your Name>